



# Homeowner's guide to Conservatories

This guide is intended to provide general information on the approvals that may be needed to construct a conservatory that is attached to a dwelling, with a description of key aspects of conservatory construction.

## Key features of conservatories

Conservatories are in the main constructed of either UPVC or timber. The key features of each are outlined below.

### uPVC construction

All uPVC frames should have a thickness of at least 55mm, with frames that are to support a glass roof rather than a polycarbonate one requiring thicker frames in the order of 80mm in thickness.

Look to see if the frame profiles carry British Standards marks:

**BSEN 12608 (Previously BS 7413)** – means that the materials are of high standard, impact resistant, corners have great strength and are colour fast.

**BS 7412** – must meet tolerance requirements in construction, the standard also covers safety, security and weather-tightness.

### Wooden construction

In the main most wooden conservatories are constructed of hardwood which can last for many years properly treated. Hardwood has little to do with the density of the timber. It is produced from deciduous trees that range from the English oak to West African varieties such as sapele. Always check the timber has come from sustainable sources. You should be aware the name hardwood does not mean it will be suitable for outdoor use.

Timber conservatories will generally require some treatment to help them maintain their appearance and quality. This can include periodic oiling, staining and painting.

## Glazing options

### Glass

You should specify that the glass is toughened or laminated to ensure the safety of anyone who might trip and fall against it.

Toughened glass breaks into small pieces with no sharp edges, whilst laminated glass comprises two panes of glass with a plastic coating film between them to ensure the glass will not shatter on breaking.

It is best to ensure the glass is fitted into frames that have internal beading so that it can't be removed externally by an intruder. If frames are externally fitted check they have either internal wedge gaskets or double-sided tape to hold the external bead in place.

### Polycarbonate sheet

**16 mm Polycarbonate** – A popular glazing material for conservatory roofs. A typical 'U' value is 2.3, which is actually better than most normal double-glazed units.

**25 mm and 35 mm Polycarbonate** – These options have been introduced relatively recently, as consumers become more concerned with higher thermal insulation levels.

## Foundation and floor construction

There are a number of ways to construct the foundations and floor slab ranging from simple 'strip' foundations, to reinforced concrete slabs with an edge beam.

Two examples are given here of possible approaches to placing your foundations and floor. Key factors to consider which may well affect the final decision on foundation type are

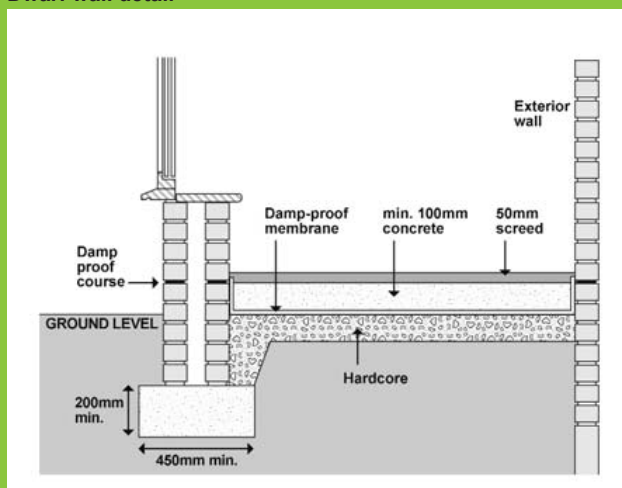
the makeup of the ground you are building on and how close any drains or large bushes or trees are to the extension.

For the floor it is important you do, where possible, incorporate thermal insulation within the floor and around its perimeters. Not only will this improve the thermal efficiency of the floor it will also make it a much more comfortable environment to walk on.

### Concrete strip foundation

This system is used when the ground conditions are firm with no previous ground disturbance.

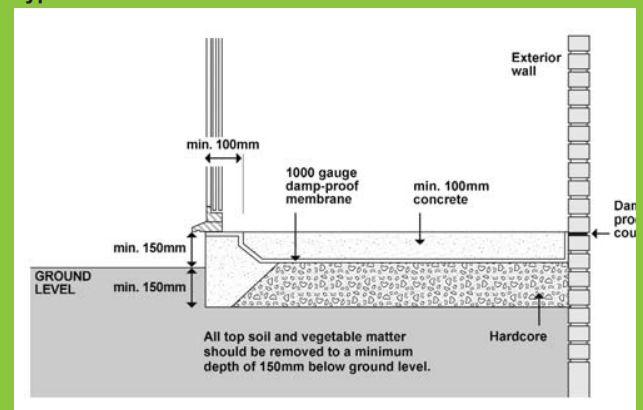
Dwarf wall detail



### Concrete raft with edge beam

Often used if there is any doubt about the ground condition and to avoid digging deep foundations. The concrete perimeter edge beam is generally reinforced with steel bars and linked to steel mesh laid in the floor slab.

Typical solid floor detail



Images for illustrative purposes only. Exact construction details should be checked with your builder or local authority.

## What permission do I need?

### Do I need planning permission for my conservatory or building regulation approval – and what's the difference?

#### Planning Permission

The erection of a conservatory may require Planning permission. Therefore whether the proposed work is subject to these requirements or is considered 'permitted development' should be determined before the work commences. This is undertaken by contacting the local Planning Authority who, should Planning permission be required, indicate what information they require to be provided with the Planning application.

#### Building Regulations

Building Regulations are in place to ensure health, safety and energy conservation. Many conservatories on domestic buildings are exempt from building regulations. Below is a list of the criteria a conservatory must meet to be exempt from building regulations:

- a) The conservatory extension must have at least 75% of the roof completely transparent or translucent and be of glass, polycarbonate sheets or similar material
- b) The extension walls are substantially glazed and must be at least half the area of the walls
- c) The extension has a floor area not exceeding 30m<sup>2</sup>
- d) The extension is sited at ground level.
- e) It must be properly separated from the house by walls or doors.
- f) Any heating system within the conservatory must be independent of the dwelling's heating system and have its own separate temperature and on/off controls

g) Glazing in critical locations must satisfy the requirements of part N, Schedule 1 of the Building Regulations (toughened/safety glass)

h) The extension does not contain any drainage facilities. (i.e. sink, WC, or washing machine).

If the conservatory does not meet all of the above it will be necessary to submit a formal Building Regulation application for the work. Your local authority building control team can advise on how this should be done.